Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

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| In the Matter of | ) | |
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| Federal-State Joint Board on Universal Service | ) | CC Docket 96-45 |
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# INITIAL COMMENTS OF THE OFFICE OF INFORMATION, LEARNING, AND TECHNOLOGY SERVICES (OILTS) THE OHIO DEPARTMENT OF EDUCATION

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## INTRODUCTION

On February 8, 1996, the President signed into law the Telecommunications Act of 1996 (1996 Act). Section 254(a)(1) of the 1996 Act requires that within one month after the date of the enactment of the 1996 Act the Federal Communications Commission (FCC) shall institute a Federal-State Joint Board on Universal Service. The Federal-State Joint Board Consists of three commissioners of the Federal Communications Commission (FCC), four state commissioners, and a state-appointed utility consumer advocate nominated by a national organization of state utility consumer advocates.

Consistent with the Congressional directives set forth by the 1996 Act, on November 7, 1996 the Joint Board issued its Recommended Decision to the FCC regarding universal service. The Joint Board's recommendation, among other items, included support for schools and libraries.

The Office of Information, Learning, and Technology Services (OILTS) of the Ohio Department of Education, hereby submits its initial comments pursuant to the FCC's November 18, 1996 Public Notice requesting comments on the Federal-State Joint Board's Recommended Decision to the FCC on Universal Service in CC Docket No. 96-45. Initial comments are due on or before December 16, 1996.

## BACKGROUND

Section 254(b)(1) of the 1996 Act requires that the Joint Board on Universal Service and the FCC shall base their policies concerning the provision for universal service on the following principles:

(1) Quality services should be available at just, reasonable, and affordable rates.
(2) Access to advanced telecommunications and information services should be provided in all regions of the country.
(3) Consumers in all regions of the nation, including low-income consumers and those in rural, insular, and high cost areas, should have access to telecommunications and information services that are reasonably comparable to rates charged for similar services in urban areas.
(4) All providers of telecommunications services should make equitable and nondiscriminatory contributions to the preservation and advancement of universal service.

(5) There should be specific and predictable federal and state support mechanisms to preserve and advance universal service.
(6) Elementary and secondary schools and classrooms, health care providers, and libraries should have access to advanced telecommunications services.
(7) The Joint Board and the FCC are permitted to determine if other principles are necessary and appropriate for the protection of the public interest, convenience, and necessity and are consistent with the 1996 Act.

## INTRODUCTION

Although other sections of the 1996 Act are relevant to the discussion of Universal Service for schools, OILTS' comments pertain specifically to Section X of docket 96-45. Other comments pertaining to the document are set forth in a separate filing from the Public Utilities Commission of Ohio.

## SUPPORT FOR SCHOOLS AND LIBRARIES

OILTS commends the Joint Board for wrestling with the complexities of issues confronting schools of telecommunications technologies.

Before commenting on specific recommendations of the Joint Board regarding schools, OILTS considers it important that the Commission be apprised of various educational technology initiatives currently underway in the state of Ohio. Ohio has taken a leadership position by establishing and funding several major educational technology programs designed to ensure that Ohio's schools have access to the advanced telecommunications services proposed by the 1996 Act.

### Ohio SchoolNet

Ohio SchoolNet is a $95 million initiative to bring the capacity for telecommunications and computer technology into every public K-12 classroom in Ohio. The Ohio legislature authorized $50 million to wire each of the 100,000 classrooms in the state for data, voice, and video transmission, and an additional $45 million for the provision of a computer workstation in each classroom of schools in those 25 percent of districts in the state determined to have the lowest property valuation. This initiative, which become law in 1994, is to be fully implemented by 1999 and will allow the installation and use of the Internet and other advanced technologies throughout Ohio's public schools. The wiring infrastructure provided by Ohio SchoolNet will advance access to the global information highway for all students and teachers and will encourage new ways of thinking, learning and doing in our schools and classrooms.

### Ohio SchoolNet Plus

In 1995, the Ohio legislature passed additional legislation to provide technology to enhance educational opportunities for our public school children. Complementary to the SchoolNet initiative, SchoolNet Plus is an expenditure of $400 million to provide at least one multimedia workstation for every five Ohio public students in grades K-4. These funds are targeted to allow schools to procure computer hardware, software, equipment, training, and services as well as equipment for two-way audio and video applications. Through Ohio SchoolNet and SchoolNet Plus, every Ohio public K-4 classroom will have state-of-the-art telecommunications technology to accommodate the diverse needs and learning styles of Ohio's students.

Ohio SchoolNet Telecommunity

The Ohio SchoolNet Telecommunity is a $26 million initiative authorized by the PUCO and funded by nine major local exchange telephone companies whose combined service area covers 97 percent of Ohio. The goal of this program is to provide grants which would allow the deployment of two-way fully interactive distance education capabilities among Ohio's schools. Working in conjunction with Ohio SchoolNet and Ohio SchoolNet Plus, the Ohio SchoolNet Telecommunity offers schools the opportunity to connect and collaborate with businesses, institutions of higher education, and community resources. The purpose of the Ohio SchoolNet Telecommunity is to afford students and teachers the opportunity to learn, experiment, and broaden their range of experiences through video resources. Other goals of the Ohio SchoolNet Telecommunity include: connect schools to libraries, universities, museums, laboratories and other community resources around the state, country and world through 21st-century technology; build capacity among teachers and students to utilize technology in the classroom as a tool to increase meaningful learning and individualized education opportunities; create virtual communities through which students, teachers, and community members are able to communicate and collaborate with individuals from different geographic regions, states, or countries.

State of Ohio Multiagency Communications System (SOMACS)

The Ohio Department of Administrative Services awarded a fiber optic infrastructure development contract in February, 1996. The State of Ohio Multiagency Communications System (SOMACS) will operationalize the coordinated use of low-cost commercial telecommunications services for all state agencies. SOMACS provides the opportunity for schools and other state institutions to access and use high speed fiber connections of up to 2 gigabits per second over the fiber backbone. In addition, the state has established universal postalized pricing for 56Kbps and 1.5 Mbps circuits. Postalized pricing allows for T-1 level point to point connections between any two schools within Ohio at a standardized price. The standardize price is at a significant discount from previously-available pricing for the same services.

Office of Information, Learning, and Technology Services (OILTS)

In 1996, the Ohio legislature passed legislation establishing the Office of Information, Learning, and Technology Services as an independent of office of the Ohio Department of Education. The mission of OILTS is to coordinate and facilitate technology initiatives for the K-12 public schools of Ohio. This includes the responsibility to maintain information on school districts which are targeted to receive extra financial assistance for technology acquisition. OILTS oversees program management of technology planning, acquisition, and installation of premise wiring, workstations, professional development and other components of Ohio's master technology plan.

## DISCUSSION

OILTS requests that the Joint Board and the Commission take into consideration Ohio's forward-looking approach and efforts in the provision of advanced telecommunications technologies for Schools in Ohio. OILTS further requests that the Commission make universal service support flexible and fair such that Ohio schools can build upon and enhance technologies already in place with support for recurring costs and technological options which would complete the system in a more optimal way way.

Functionalities/Services Available

The Joint Board recommends maximum flexibility for choosing a variety of products and services including: telecommunications services, network components, Internet services, and internal classroom wiring. (Paragraph 458).

OILTS concurs with the Joint Board recommendation to provide maximum flexibility to schools in the choice of telecommunications products and services. The breadth of choice in telecommunications services, network components, Internet services, and internal wiring will augment and complement existing Ohio technology initiatives.

The Joint Board recognizes that schools have already secured various technology components including internal wiring (paragraph 477) and that the provision of such connections is both technically feasible and economically viable. OILTS notes that the Ohio legislature committed $50 million for the provision of internal wiring for school classrooms and would like the Joint Board and FCC to consider the equity issue in the compensation of states which have invested heavily in telecommunications technology.

Discount Methodology

The Joint Board recommends that the Commission adopt a percentage discount approach, adjusted for schools and libraries that are defined as economically disadvantaged or those in high cost areas (Paragraph 457). The Joint Board also recommends a discount matrix for telecommunications services, Internet access, internal connections, and network components.

OILTS concurs with the discount methodology proposed by the Joint Board for fixed rate (regulated) services such as telecommunications services. OILTS considers the discount methodology for telecommunications services to be particularly supportive in reducing the long-term recurring costs for high-cost advanced services related to Internet access and two-way video applications. The discount system for low-wealth and high cost schools will provide more opportunities for all schools to have access to advanced technologies.

Although OILTS concurs with the discount methodology for regulated services, it is unclear as to whether discounts for unregulated items such as network components, Internet servers, premise wiring, or Internet services will be valuable to schools. (Paragraph 477).

Because of the wide variability in product offering amongst these categories, one can not compare the discount on a particular product in a particular setting, to a similar configuration in another. For example, the percentage discount from a single Category 5 unshielded twisted pair classroom wiring connection in a classroom with plaster board walls, will not be the same as a four filament fiber classroom wiring connection in a classroom with masonry walls. Similarly, an ISDN network router configured for a single 128 kbps connection supporting the TCP/IP protocol will not be the same as a multi-port T-1 router supporting numerous protocols.

Further, the fast pace of technology product evolution and the price sensitivity of these products will make it difficult to establish and maintain a consistent discount structure. Product lifecyles of 6 to 12 months are the norm.

Without pricing controls for network hardware, wiring, or Internet services it is impossible to predict the value of a discount. A vendor may increase the price of their products or services in order to assure a higher profit after school discount. This may result in higher prices for products to non-school customers in the commercial market

Moreover, because of the variability in vendor product offerings in these categories, comparing "discounts" between vendors may not afford meaningful criteria in determining an appropriate solution. It is questionable as to whether pricing discounts on unregulated items will be "predictable and specific," as established in Section 254(b)(5).

Although OILTS concurs with the Joint Board recommendation to permit schools the flexibility to address their needs in the best way they see fit (Paragraph 460-461), the lack of meaningful criteria necessary to evaluate technology solutions may actually be a detriment to the implementation process.

This is especially true for districts in rural areas who often do not have the necessary technical resources to solicit and evaluate vendor proposals. In contrast, districts which have technical resources may be better able to acquire technology through the Universal Service Program, an outcome which may be opposite to the program's intent.

OILTS believes that FCC regulation of pricing for equipment, wiring, and Internet services would set an anti-competitive precedent and add a large administrative burden to already complex regulatory system.

Last, with a discount-oriented methodology it is unclear as to how districts or states who have made substantial technology investments would receive equitable reimbursement for the effort. A district who has fully wired their school buildings and provided Internet connectivity to each classroom should not be disadvantaged by the program, they should receive reimbursement of equal value in other forms.

Funding Mechanism

The Joint Board recommends that schools seek competitive bids for all services eligible through section 254(h) discounts (Paragraph 546), and that requests for services are submitted by districts to a fund administrator.

Although OILTS agrees that the schools or a purchasing consortia should be required to utilize competitive bidding in the selection of telecommunications products and services, OILTS recommends that the size and duration of the Universal Services Fund be established, and apportioned on a state by state basis (Paragraph 512),

OILTS further recommends that state education agencies (SEA) be required to apportion funds on a district basis, based on criteria established by the states and the FCC.

Without an identified annual technology budget it is difficult for districts to adequately predict the source and amount of financial funds necessary to implement and maintain technology systems.

A process requiring districts to submit technology plans annually may result in a change of funding which could impact a multi-year implementation process where the district has invested significant portions of their own funds.

Without the ability to apportion funds, a state's ability to coordinate state technology efforts with the Universal Service Fund may be severely compromised.

Economically Disadvantaged Schools

The Joint Board recommendation for economically disadvantaged schools is to provide additional or deeper discounts for the same services available within the Universal Service Program. (paragraph 555).

Although OILTS agrees that the national school lunch program is appropriate criterion for identifying low-income districts (typically in urban areas), OILTS does not agree that it is an appropriate criterion for identifying low-wealth/high-communications cost districts (typically rural.) (Paragraph 564).

If the intent of the legislation is to provide universal access to all school districts, especially those remote from communications centers, another criterion should be selected. Such a criterion may be different among the states because of geography, distribution of metropolitan areas, and complexity of LEC LATA boundaries.

Implementation

OILTS concurs with the Joint Board recommendation to permit schools to begin using discounted services at the start of the 1997-1998 school year. OILTS also concurs with the Joint Board recommendations for self-certification (paragraph 630).

OILTS agrees that access to telecommunications and other technology resources should not increase the disparity between economically disadvantaged and more affluent districts. However, the increased discount will not be sufficient incentive to encourage the rapid deployment of these technologies. This is because disadvantaged districts do not have existing technical expertise and will require some time to hire or develop such expertise necessary to implement the program.

Therefore OILTS recommends that a trust fund or other similar mechanism be established to hold funding to provide such districts with additional time to acquire the technical assistance necessary to implement the Universal Services program.

Although OILTS agrees with the three criteria for self-certification by school districts and the need for a technology plan, we reject the notion that "fund administrator" should be the recipient of individual school district technology applications or certification request.

OILTS view is that existing state education agencies who are already preforming similar tasks should be the recipient of technology applications and certification requests.

This approach would assure accountability and prevent duplication of effort at the federal level, while insuring the state's ability to coordinate the Universal Service initiative with state technology programs. Without continuing and current information on the status of a school district's technology programs, it is difficult to assure that existing or future state technology programs could be effectively coordinated.

In addition, without program execution responsibilities, states may not be as effective in establishing purchasing consortia. Existing state initiatives for telecommunications rate regulation include public institutions other than K-12 and libraries. Without program execution responsibilities states may not be able to effectively coordinate purchasing tasks amongst multiple public institutions, which OILTS believe would be financially beneficial to schools and libraries.

OILTS has the utmost confidence in a state utility commission's ability to oversee fiscal accountability and to preserve the climate of competition, but believe that program execution is best accomplished by state education agencies who have first hand knowledge of technology status at the district level.

CONCLUSION

In closing, OILTS would like to thank the FCC for the opportunity to file comments in this docket.

Respectfully submitted,

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